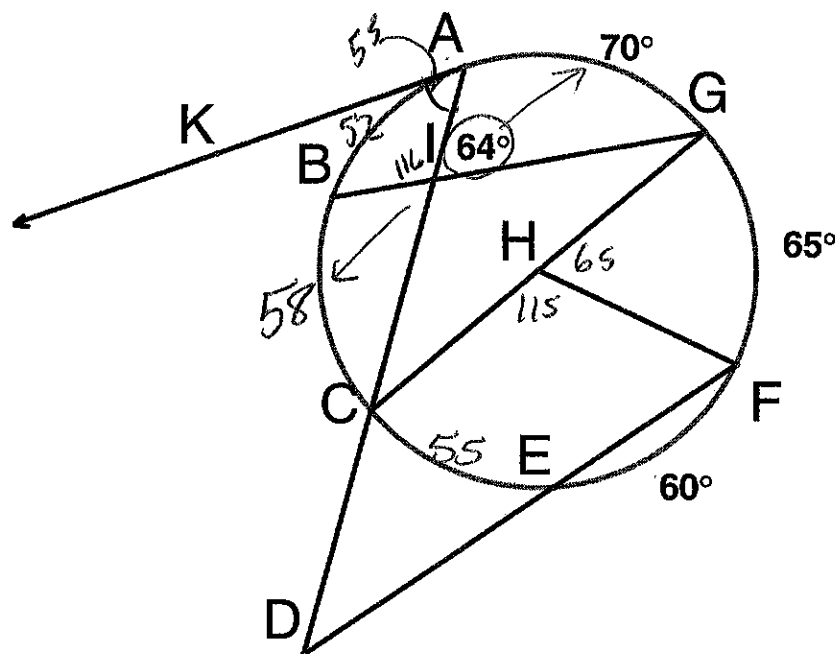


Name Key

Date _____

202 Angle Review Picture



\overline{CG} is the diameter

\overline{KA} is tangent to $\odot H$

Find the measures of the following arcs and angles. Make sure you think about what kind of angle it is before you find it. (Central, inscribed, inside, or outside)

Find:

$$m\widehat{CE} = \cancel{55} \xrightarrow{115} \xleftarrow{60} 64 = \frac{1}{2}(70 + x) \quad \begin{matrix} 128 = 70 + x \\ \rightarrow x = 58 \end{matrix}$$

$$m\widehat{CB} = 58 \quad \xleftarrow{180 - 70 - 58}$$

$$m\widehat{AB} = 52$$

$$m\angle ACG = \frac{1}{2}70 = 35$$

$$m\angle D = 40 \quad \frac{1}{2}(135 - 55)$$

$$m\angle GHF = 65 \quad = \text{arc}$$

$$m\angle FHC = 115 \quad = \text{arc } 55 + 60$$

$$m\angle AIB = 116 \quad \xrightarrow{180 - 64} \text{ or } \frac{1}{2}(52 + 55 + 60 + 65)$$

$$m\angle KAC = \frac{1}{2}(110) = 55$$

$$m\angle BGC = \frac{1}{2}(58) = 29$$

10-8

Skills Practice

Equations of Circles

Write an equation for each circle.

1. center at origin,
- $r = 6$

$$x^2 + y^2 = 36$$

2. center at
- $(0, 0)$
- ,
- $r = 2$

$$x^2 + y^2 = 4$$

3. center at
- $(4, 3)$
- ,
- $r = 9$

$$(x-4)^2 + (y-3)^2 = 81$$

4. center at
- $(7, 1)$
- ,
- $d = 24$

$$(x-7)^2 + (y-1)^2 = 144$$

5. center at
- $(-5, 2)$
- ,
- $r = 4$

$$(x+5)^2 + (y-2)^2 = 16$$

6. center at
- $(6, -8)$
- ,
- $d = 10$

$$(x-6)^2 + (y+8)^2 = 25$$

7. a circle with center at
- $(8, 4)$
- and a radius with endpoint
- $(0, 4)$

$$64 = (x-8)^2 + (y-4)^2$$

$$(0-8)^2 + (4-4)^2$$

8. a circle with center at
- $(-2, -7)$
- and a radius with endpoint
- $(0, 7)$

$$r^2 = (0+2)^2 + (7+7)^2$$

$$4 + 196$$

$$200 = (x+2)^2 + (y+7)^2$$

9. a circle with center at
- $(-3, 9)$
- and a radius with endpoint
- $(1, 9)$

$$16 = (x+3)^2 + (y-9)^2$$

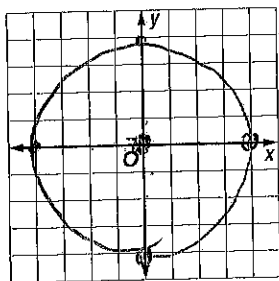
10. a circle whose diameter has endpoints
- $(-3, 0)$
- and
- $(3, 0)$

$$C(0, 0)$$

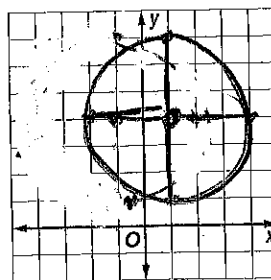
$$x^2 + y^2 = 9$$

Graph each equation.

- 11.
- $x^2 + y^2 = 16$



- 12.
- $(x-1)^2 + (y-4)^2 = 9$



$$C(1, 4)$$

$$r = 3$$